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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/014,165	12/11/2001	Hiromichi Mitamura	01804/LH	2727
1933	7590	02/03/2006	EXAMINER	
FRISHAUF, HOLTZ, GOODMAN & CHICK, PC			WAGNER, CRYSTAL L	
220 Fifth Avenue			ART UNIT	
16TH Floor			PAPER NUMBER	
NEW YORK, NY 10001-7708			2852	

DATE MAILED: 02/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

H.A

**Office Action Summary**

Application No.

10/014,165

Applicant(s)

MITAMURA, HIROMICHI

Examiner

Crystal L. Wagner

Art Unit

2852

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
 Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 March 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>20011211</u> . | 6) <input type="checkbox"/> Other: ____.  |

## DETAILED ACTION

### *Specification*

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Appropriate correction is required.

The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3, 5-6, 9, 11, and 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamauchi (U.S. Pub. No. 2002/0057916 A1) in view of Asanuma *et al.* (U.S. Patent No. 5,839,018) and Yoshinaga *et al.* (U.S. Patent No. 5,905,008).

Regarding claims 1 and 9, Yamauchi discloses an image forming apparatus 16 for receiving an instruction to form an image comprising a plurality of units (photosensitive unit 3 & development unit 4) necessary for image forming, a first storage section 20 which stores an amount of use of unit 3, a second storage section 20 which stores a condition which enables each

Art Unit: 2852

unit to execute an optimal image forming operation corresponding to the amount of use of each unit, and a control section which reads the condition from the second storage section, which enables said unit to execute the optimal image forming operation, on the bases of the amount of use of said unit stored in the first storage section, thereby operating said unit under the read condition (as disclosed in pars. [0094]-[0100]; see also: Figs. 1 and 8). Yamauchi differs from the claimed invention because it does not disclose that the plurality of units is dismountable. Yoshinaga *et al.* discloses an image forming apparatus comprising a plurality of dismountable units (photosensitive unit 1 & developing unit 4) necessary for image forming. Yoshinaga *et al.* is evidence that one of ordinary skill in the art of units necessary for image forming in an image forming apparatus would have recognized the benefits of designing the units to be dismountable. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to modify the invention of Yamauchi to specify that the plurality of units be dismountable in order to facilitate replacement of these parts when they are deteriorated with use, as per teachings of Yoshinaga *et al.* Yamauchi also differs from the claimed invention because it does not teach that the amount of use of the developing unit is stored. Asanuma *et al.* teaches an image forming apparatus comprising a plurality of units (photosensitive unit 1 & developing unit 4) necessary for image forming, a first storage section which stores an amount of use of unit 4, a second storage section which stores a condition which enables each unit to execute an optimal image forming operation corresponding to the amount of use of the unit, and a control section 122 which reads the condition from the second storage section, which enables said unit to execute the optimal image forming operation, on the basis of the amount of use of said unit stored in the first storage section, thereby operating said unit under the read condition (as

Art Unit: 2852

disclosed in col. 27, lines 51-62). Asanuma *et al.* is evidence that one of ordinary skill in the art of developing units would have recognized the benefits of monitoring the use of the developing unit. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to modify the invention of Yamauchi to also monitor the usage of the developing unit in order to create copy images of high quality, as per teachings of Asanuma *et al.* (as disclosed in col. 28, line 14).

As to claims 3 and 11, Yamauchi additionally discloses that one of the units necessary for the image forming is a drum unit 3.

As to claims 5 and 13, Asanuma *et al.* further teaches that one of the units necessary for the image forming is a developing unit 4.

As to claims 6 and 14, Asanuma *et al.* further discloses that the amount of use of each unit is the number of printed sheets of paper (as disclosed on col. 27, lines 51-62).

Claims 2 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Yamauchi (U.S. Pub. No. 2002/0057916 A1), Asanuma *et al.* (U.S. Patent No. 5,839,018), and Yoshinaga *et al.* (U.S. Patent No. 5,905,008) as applied to claims 1, 3, 5-6, 9, 11, and 13-14 above, and in further view of Lee (U.S. Patent No. 5,812,902).

With respect to claims 2 and 10, the combination of Yamauchi (U.S. Pub. No. 2002/0057916 A1), Asanuma *et al.* (U.S. Patent No. 5,839,018), and Yoshinaga *et al.* (U.S. Patent No. 5,905,008) disclose the invention as set forth above. The combination differs from the claimed invention because it does not specifically teach that the image forming apparatus further comprises a detection section which detects whether or not said each unit is new or old, and wherein the control section resets the amount of use stored in the first storage section and

Art Unit: 2852

then reads the condition which enables said each unit to execute the optimal image forming operation, when the detection section has detected that said each unit is new. Lee discloses an image forming apparatus that receives an instruction to form an image comprising a process cartridge, a storage section which stores an amount of usage, and a detection section which detects whether or not the process cartridge is new or old, and wherein the control section resets the amount of use stored in the storage section when the detection section has detected that the process cartridge is new (as disclosed in col. 7, lines 4-50). Lee shows that one of ordinary skill in the art of replacing units in image forming apparatuses would have recognized that the storage means should be reset upon replacement with a new unit. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to modify the combination of Yamauchi, Asanuma *et al.*, and Yoshinaga *et al.* to specify that the image forming apparatus further include a detection means for detecting whether the replaced unit is new or old and resetting the storage section when a new unit is detected in order to maintain an accurate history of usage of the unit, as per teachings of Lee.

Claims 4 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Yamauchi (U.S. Pub. No. 2002/0057916 A1), Asanuma *et al.* (U.S. Patent No. 5,839,018), and Yoshinaga *et al.* (U.S. Patent No. 5,905,008) as applied to claims 1, 3, 5-6, 9, 11, and 13-14 above, and in further view of Honda *et al.* (U.S. Patent No. 5,701,551).

With regard to claim 4, the combination of Yamauchi, Asanuma *et al.*, and Yoshinaga *et al.* discloses the invention as set forth above. The combination differs from the claimed invention because it does not teach monitoring the charging unit. Honda *et al.* discloses an image forming unit comprising a charging member 2 whose use is monitored. Honda *et al.*

Art Unit: 2852

further teaches that the image forming apparatus comprises a control section that enables the charging member to execute the optimal image forming operation on the basis of the amount of use of the charging member (as disclosed in col. 11, lines 48-56). Honda *et al.* is evidence that one of ordinary skill in the art of image forming apparatuses comprising control means for monitoring the usage of internal units would have recognized that the charging member should also be monitored and controlled. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Yamauchi, Asanuma *et al.*, and Yoshinaga *et al.* to specify that the charging member be one of the said units necessary for image formation in order for the image forming apparatus to always offer a satisfactory image quality and density, as per teachings of Honda *et al.* (as disclosed in col. 11, lines 55-56).

Claims 7-8 and 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Yamauchi (U.S. Pub. No. 2002/0057916 A1), Asanuma *et al.* (U.S. Patent No. 5,839,018), and Yoshinaga *et al.* (U.S. Patent No. 5,905,008) as applied to claims 1, 3, 5-6, 9, 11, and 13-14 above, and further in view of Gomi *et al.* (U.S. Patent No. 6,324,357 B1) and Otomo *et al.* (U.S. Pub. No. 2001/0028801 A1).

The combination of Yamauchi, Asanuma *et al.*, and Yoshinaga *et al.* disclose the invention as set forth above. The combination differs from the claimed invention because it does not teach that the first and second storage units are provided in each said unit. Gomi *et al.* discloses an image forming apparatus for receiving an instruction to form an image wherein a storage means 60 is provided in the unit which includes at least said image bearing member 1 (as disclosed in col. 24, line 66 through col. 25, line 4 & col. 26, lines 14-19; see also: Fig. 1).

Art Unit: 2852

Otomo *et al.* teaches an image forming apparatus for receiving an instruction to form an image wherein a storage means 31 is provided in the developing unit 4 (as disclosed in par. [0066]; see also: Fig. 1). Omoto *et al.* further discloses that the storage means stores information for identifying whether the cartridge is new. Gomi *et al.* and Otomo *et al.* are evidence that one of ordinary skill in the art of storage means locations in image forming apparatuses would have recognized that the storage means could be provided anywhere in the image forming apparatus, including in each of the photosensitive and developing units. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to modify the combination of Yamauchi, Asanuma *et al.*, and Yoshinaga *et al.* to specify that the first and second storage sections are provided in each of the units in order to physically associate each storage section with the corresponding unit in the image forming apparatus, as per teachings of Gomi *et al.* and Otomo *et al.*

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Crystal L. Wagner whose telephone number is 571-272-8555. The examiner can normally be reached on Mon. - Fri. (7:30am - 4:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Arthur T. Grimley can be reached on 571-272-2136. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Art Unit: 2852

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CW



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